

Challenge

Issue

Screen housing wore prematurely, leading to bypass of waste scrap and unscheduled downtime annual costs >\$110K.

Goals

- Avoid capital expense of \$25K for new screen
- Increase MTBR from 6 to >18 months
- Reduce associated maintenance and downtimes costs of \$57K every 6 months

Root Cause

Trapped waste, including glass, sand, and metal particles carried downstream damaged primary screen housings.



Screen housing after surface prep

Solution

Preparation

- Steam clean at 100 bar (1400 psi)
- Grit blast to Sa 2.5 with 3 mil (75 µm) angular profile

Application

1. Rebuild worn and scored areas with **ARC BX1***
2. Apply smoothing coat of **ARC 855**

*ARC BX1 is the "Bulk" package size of ARC 890



Application of ARC BX1*

Results

Client Reported

Screen life increased from 6 to >36 months. Inspection at 36 months showed >85% of original coating thickness remained.

Total 36 month period

Replacement (6 mo. life x \$25K)	\$150.0K
Downtime:	\$342.0K
Total (36 month period):	\$492.0K
ARC Coating:	-\$ 4.5K
Total cost avoidance:	\$487.5K

*Cost avoidance: New screen every 6 months, downtime and lost production

\$=USD



Housing protected with ARC BX1* and ARC 855